

# Work Order ID 76673

November-18-11 1:30:35 PM

**\*76673\***

Page 1

Item ID: D2886-3 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Cable Guard  
 Start Date: 18/11/2011 Start Qty: 4.00 **\*4\*** Cust Item ID:  
 Required Date: 25/11/2011 Req'd Qty: 4.00 **\*4\*** Customer:  
 Reference:

Approvals: Process Plan: M.L.J Date: 11/11/11 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_  
 Run Start **\*NR1\***  
 Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2886	Rev <u>B</u>								
100		0.00							
<b>*100*</b>									
Waterjet	Memo	0.00							
FLOW CNC Waterjet	CUT BLANK AS FILE D2886-3								
140		0.00							
<b>*140*</b>	HAAS CNC VERTICAL MACHINING #1								
HAAS I	Memo	0.00							
HAAS CNC vertical machine #1	Machine as per folio D2886-3								
150	QC2- Inspect parts off machine FAI/FAIB	0.00							
<b>*150*</b>									
QC	Memo	0.00							
Quality Control									

11-11-23

5  
P10

DAS  
02  
88

ET 12-12-19 (x4)

DAS  
02  
88

ET 12-12-19 (x4)

W/O: 76678


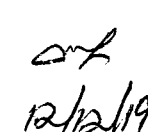
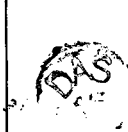
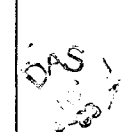

## WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2886-3 PAR #: \_\_\_\_\_ Fault Category: Water jet NCR: Yes No DQA: AK Date: 13/1/17  
 Resolution: \_\_\_\_\_ Disposition: Scrap QA: N/C Closed: AK Date: 16

NCR: 13/29X

## WORK ORDER NON-CONFORMANCE (NCR)

DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12-12-19	100	blank from waterjet too short. Length supposed to be 39.000". Blank is 38.9375" 1 piece	 06/01/19	scrap no replace Qty +1.	BT 12-12-19	 12/12/19	 06/01/19	 12/12/19
		R.C. water jet blank program is not correct. N/A ↑ yes it is. 	12/12/19				12/12/19	

\$113.29

NOTE: Date &amp; initial all entries

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 Required Date: 25/11/2011 Req'd Qty: 4.00 **\*4\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 <b>*160*</b> QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00		OK 12/12/19		4	10		
190 <b>*190*</b> Packaging Packaging	Identify as per dwg & Stock Location: <b>ST201A</b>  Memo	0.00  0.00				Hx			SP 12-12-24,
200 <b>*200*</b> QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00  0.00							13/01/09 JF  u 13-01-03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Page 1

Work Order ID: 76673

\*76673\*

Parent Item: D2886-3

\*D2886-3\*

Parent Item Name: Cable Guard

Start Date: 18/11/2011

Required Date: 25/11/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP B00.05.19Added inspect level 8EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB1750X1000 X4800		Purchased	No			100	sf	0.0000	0.2708	1.140211			

\*MUHMWB1750X1000X4800\*

UHMW 1.75x1.00x48.00

\*\*

119145 181111-23

1,00

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

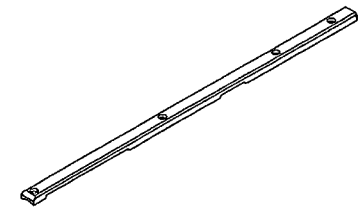
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other



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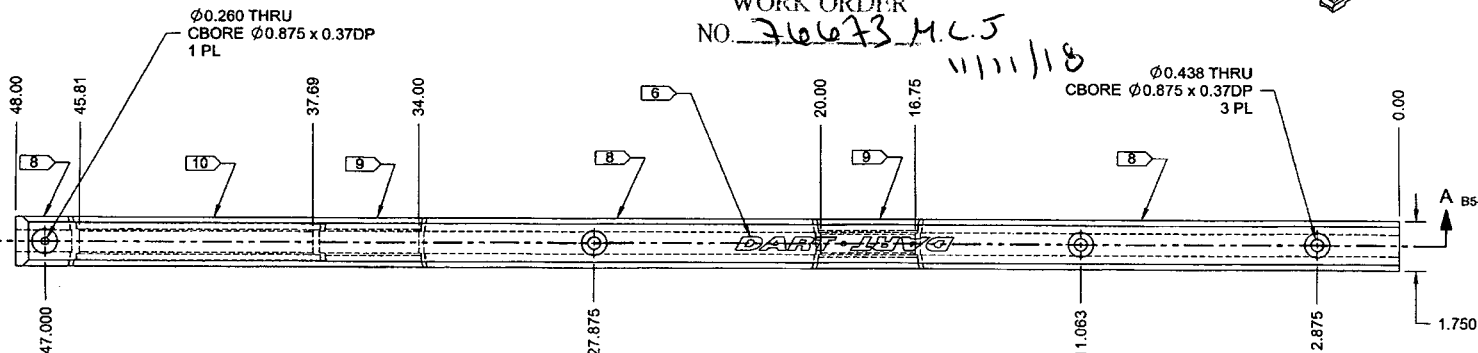
WITHOUT NOTICE  
WORK ORDER

NO. 76673 M.C.5  
11/11/18



8 7 6 5 4 3 2 1

A



0.44 X 45°  
CHAMFER



SECTION A-A C1-1

50°  
1 PL 11

25°  
4 PL 11

**D2886-1 GUARD**

**RELEASED**  
2009-12-02  
*WJ*

**NOTES:**

- 1) MATERIAL: UHMW BLACK PER DART SPEC. MUHMBW10
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.020 TO 0.040 MAX
- 6) IDENTIFICATION: ENGRAVE TWO DART LOGOS (OPPOSITE AS SHOWN) ON NEAR SIDE TO MAX DEPTH OF 0.015 AND MIN TOOL RAD OF R0.250.  
ENGRAVE P/N ON FAR SIDE TO MAX DEPTH OF 0.010 AND MIN TOOL RAD OF R0.010.
- 7) WEIGHT: 2.22 lbs.
- 8) MACHINE CONSTANT SECTION B-B (ZN B7-3)
- 9) MACHINE CONSTANT SECTION C-C (ZN B5-3)
- 10) MACHINE CONSTANT SECTION D-D (ZN B3-3)
- 11) ANGLE OF TRANSITION AS SHOWN BETWEEN CONSTANT SECTIONS, WITH MIN RADIUS OF TRANSITION OF R0.25.

B	REDRAW, -1 PROFILE CHG'D TO AVOID SADDLE RIDGES (ZN B3-3), R0.25 WAS R0.50 (ZN A4-1)	CP	09.11.12
A	NEW ISSUE	CP	99.06.23
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.11.12		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D2886** REV. B  
SHEET 1 OF 3

TITLE **GUARD** SCALE NTS

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8 7 6 5 4 3 2 1

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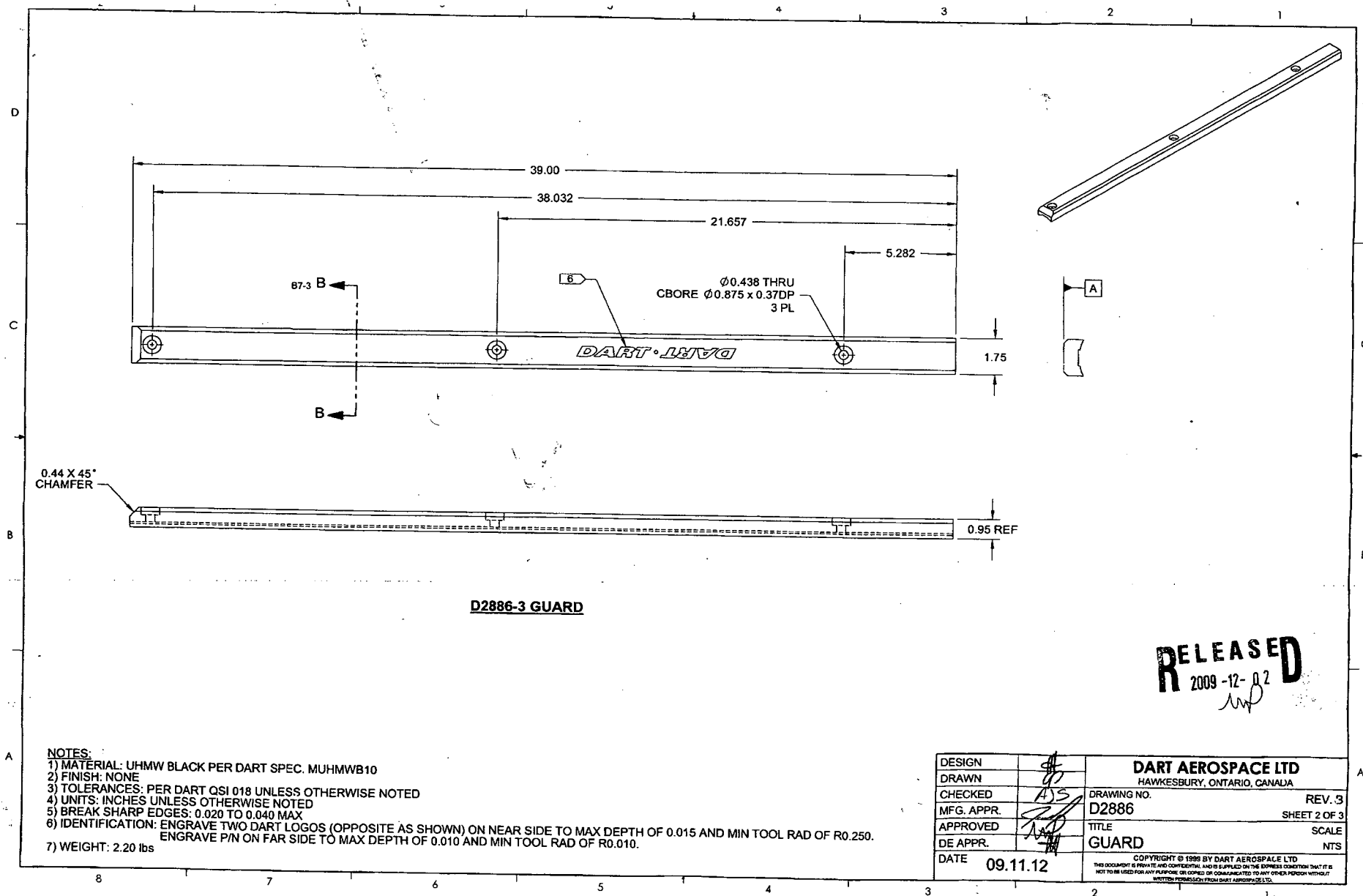
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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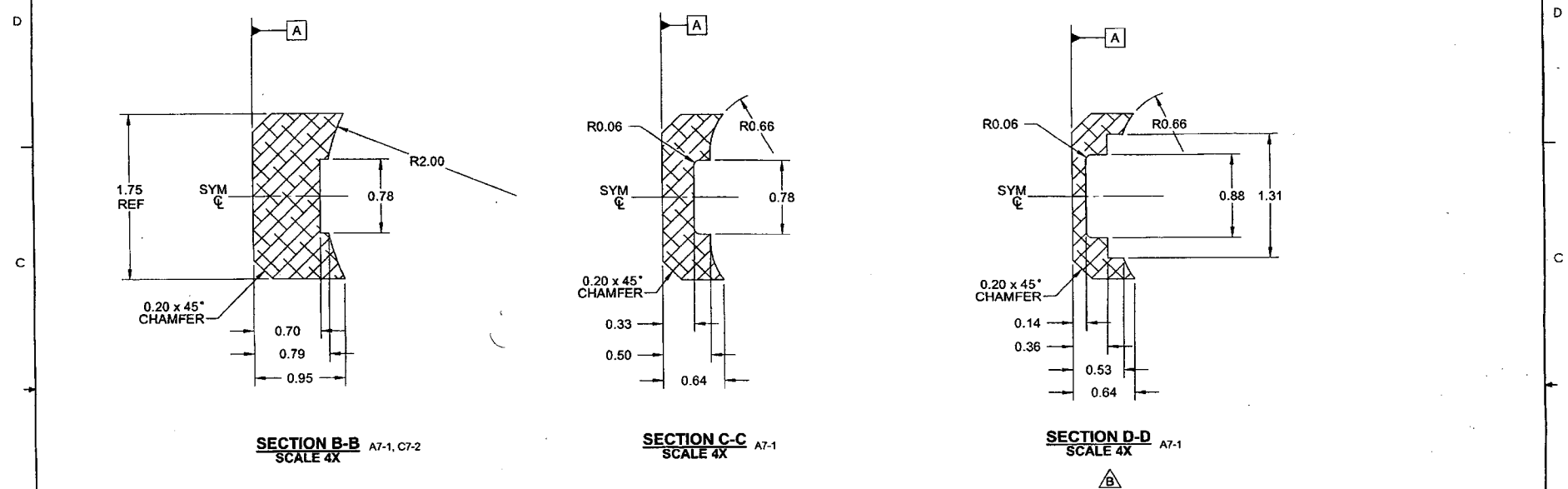
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76673

8 7 6 5 4 3 2 1



RELEASED  
2009-12-03

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